

***EXAMINER'S AMENDMENT***

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

David Nelson (Reg. No. 47,818), the attorney in record, gave authorization for this Examiner's Amendment over the telephone during an interview. The claims amendments are as follow:

**PLEASE AMEND THE CLAIMS AS FOLLOWS:**

1. (Currently amended) A method, comprising:  
receiving, at a computer device, requests for services from a client, where  
receiving the requests for the services comprises:  
receiving a connection request from the client,  
pre-establishing a plurality of session managers, and  
instantiating a session manager to receive the requests for the services,  
where an interface engine in the computer device listens for the connection  
request and instantiates the session manager to receive the requests for services  
related to the connection request, and where instantiating comprises instantiating  
one of said plurality of session managers;  
parsing, via the computer device, said requests to obtain parsed requests;

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obtaining, via the computer device, service definitions based on said parsed requests;

executing, via the computer device, commands based on said service definitions, said commands corresponding with applications recognized by a mainframe system, said commands [[for]] providing results to said requests for the services;

creating, via the computer device, a plurality of connections with the mainframe system to form a connection pool;

removing, via the computer device, one of the plurality of connections from the connection pool;

assigning, via the computer device, the one of the plurality of connections to interact with the mainframe system when one of the requests for services is received;

returning, via the computer device, the one of the connections to the connection pool when the client chooses to end a session with the mainframe system; and

providing, via the computer device, said results to said client.

2-3. (Canceled)

4. (Previously presented) A method according to claim 1, comprising:

retrieving entitlement information related to said client,

where obtaining said service definitions is in response to a determination that said entitlement information indicates that the computer device is permitted to process said parsed requests for said client.

5. (Previously presented) A method according to claim 4, comprising:  
returning an error message to said client when said entitlement information indicates that the computer device is not permitted to process said parsed requests for said client.
6. (Previously presented) A method according to claim 1, where:  
obtaining service definitions comprises determining that said requests for the services are requests for single commands; and  
when said requests for the services are the requests for the single commands, executing the commands for providing the results comprises executing said single commands at an interface to interface said client with said mainframe system.
- 7-8. (canceled)
9. (Currently amended) A method according to claim ~~[[7]]~~ 1, where:  
creating said plurality of connections comprises performing commands corresponding to startup sections of said service definitions; and  
executing commands comprises performing commands corresponding to execution sections of said service definitions.

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10. (Previously presented) A method according to claim 9, where executing commands comprises performing commands corresponding to a close-up section of one of said service definitions to release said plurality of connections when said requests for services include a logout request.

11. (Previously presented) A method according to claim 1, comprising:  
specifying identifiers for screens of said mainframe system; and  
specifying actions to be taken with respect to said screens to generate said service definitions, said actions including one of:

receiving said requests for services, and  
providing said results.

12. (Original) A method according to claim 1, comprising:  
opening a socket connection to an interface to facilitate interfacing with said mainframe system; and  
managing said interface over said socket connection.

13. (Previously presented) A method according to claim 12, where managing comprises at least one of:  
controlling access of said clients to said interface,  
generating said service definitions, and  
modifying said service definitions.

14. (Previously presented) A method according to claim 12, where managing comprises:

logging activities of said interface to obtain logs; and  
debugging executing commands based on said logs.

15-17. (Canceled)

18. (Currently amended) An interface device, comprising:

a session manager to receive requests for services from a client;  
a message processor to parse said requests to obtain parsed requests;  
a service processor to obtain service definitions based on said parsed requests;

[[and]]

a host connector to:

interact with a mainframe system and to execute commands based on  
said service definitions, said commands corresponding with applications  
recognized by said mainframe system for providing results to said requests for  
services, and

provide the results to the client;

an interface engine to listen for a connection request and instantiate the session  
manager to receive the requests for services related to the connection request;

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a thread pool of pre-established session managers, the interface engine to instantiate the session manager from one of the pre-established session managers from the thread pool, and

a connection pool including a plurality of connections between the host connector and the mainframe system, where the interface engine is further to:

removing one of the plurality of connections from the connection pool,

assigning the one of the plurality of connections to interact with the mainframe system when one of the requests for services is received, and

returning the one of the connections to the connection pool when the client chooses to end a session with the mainframe system.

19. (Previously presented) An interface device according to claim 18, comprising:

a database to store a plurality of service definitions; and

a storage manager to:

communicate with said service processor, and

retrieve, from said database, said service definitions based on said parsed requests.

20-22. (Canceled)

23. (Currently amended) An interface device according to claim ~~[[20]]~~ 18,

comprising:

a cache memory; and

a service cache to store, in said cache memory, said service definitions for said requests for services related to said connection.

24. (Previously presented) An interface device according to claim 18, comprising an administrative tool to facilitate at least one of:

creating new service definitions, and  
modifying existing service definitions.

25. (Previously presented) An interface device according to claim 24, where said administrative tool comprises a socket connection to communicate administrative requests to said interface device.

26. (Previously presented) An interface device according to claim 18, comprising a command processor to execute administrative commands based on said requests for services when said requests for services are requests for a single command.

27. (Previously presented) An interface device according to claim 18, comprising:  
an authenticator containing access privilege information for said client, said access privilege information to determine if said service processor is authorized to obtain said service definitions based on said parsed requests for said client.

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28. (Previously presented) An interface device according to claim 18, comprising a logging service to log activities of said interface device.

29. (Currently Amended) A computer-readable storage medium encoded with instructions executable by a network device, the instructions to cause a processor in the network device to implement a method comprising:

receiving requests for services from a client, where receiving said requests for the services comprises:

receiving a connection request from said client,

pre-establishing a plurality of session managers, and

instantiating a session manager to receive said requests for the services,

where an interface engine in the computer device listens for the connection

request and instantiates the session manager to receive the requests for services

related to the connection request, and where instantiating comprises instantiating

one of said plurality of session managers;

parsing said requests to obtain parsed requests;

obtaining service definitions based on said parsed requests;

executing commands based on said service definitions, said commands

corresponding with applications recognized by a mainframe system, said commands

providing results to said requests for the services;

creating, via the computer device, a plurality of connections with the mainframe system to form a connection pool;



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removing, via the computer device, one of the plurality of connections from the connection pool;

assigning, via the computer device, the one of the plurality of connections to interact with the mainframe system when one of the requests for services is received;  
returning, via the computer device, the one of the connections to the connection pool when the client chooses to end a session with the mainframe system; and  
providing said results to said client.

30. (Canceled)

31. (Currently Amended) The computer-readable storage medium of claim [[30]] 29, where:

creating said plurality of connections comprises performing commands corresponding to startup sections of said service definitions; and

executing commands comprises performing commands corresponding to execution sections of said service definitions.

32. (Previously presented) The computer-readable storage medium of claim 31, where executing commands includes:

performing commands corresponding to a close-up section of one of said service definitions to release said plurality of connections when said requests for services include a logout request.

***Allowable Subject Matter***

Claims 1, 4-6, 9-14, 18-19, 23-29 and 31-32 are allowed.

The following is an Examiner's statement of reasons for allowance:

The prior arts in record fail to teach "instantiating a session manager to receive the requests for the services, where an interface engine in the computer device listens for the connection request and instantiates the session manager to receive the requests for services related to the connection request, and where instantiating comprises instantiating one of said plurality of session managers, and creating a plurality of connections with the mainframe system to form a connection pool, removing, via the computer device, one of the plurality of connections from the connection pool; assigning the one of the plurality of connections to interact with the mainframe system when one of the requests for services is received, and returning the one of the connections to the connection pool when the client chooses to end a session with the mainframe system", as recited in independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/El Hadji M Sall/

Examiner, Art Unit 2457

/Salad Abdullahi/

Primary Examiner, Art Unit 2457